

DETAILED ACTION

1. This action is in the acknowledgement of the amendment filed, after final action, on April 03, 2008. Claims 1-19 and 21 are pending and have been considered below.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with James Harrison on April 23, 2008.

The Claims in the application has been amended as follows.

In Claims:

- (1) In claim 1, at the beginning of line 4; insert -- **a** --.
- (2) In claim 1, at the beginning of line 9; insert -- **a** --.
- (3) In claim 1, line 11; put the word "**mux**" between "**multiplexer**" and "**control**" inside – parenthesis --.
- (4) In claim 1, at the beginning of line 13; insert -- **a** --.
- (5) In claim 1, at the beginning of line 18; replace the word "**mux**" with -- **a multiplexer (mux)** --.
- (6) In claim 1, at the beginning of line 23; insert -- **a** --.

- (7) In claim 1, at the beginning of line 38; insert -- **a** --.
- (8) In claim 1, at the beginning of line 42; insert -- **an** --.
- (9) In claim 1, line 45; delete -- **for converting** -- between “**circuits**” and “**for converting the**”.
- (10) In claim 1, at the beginning of line 48; insert -- **a** --.
- (11) In claim 7, line 4; -- **delete an extra space** -- between “**mask**” and “**violation**”.
- (12) In claim 7, line 4; -- **insert a period** -- at the end of line 4.
- (13) In claim 11, at the beginning of line 2; insert -- **a** --.
- (14) In claim 11, at the beginning of line 5; replace “**mux**” with -- **a multiplexer (mux)** --.
- (15) In claim 11, line 9; replace the word “**for**” between “**data**” and “**a**” with -- **based on** --.
- (16) In claim 11, line 11; delete the word “**control**” between “**mux**” and “**circuitry**”.
- (17) In claim 11, line 13; delete the word “**control**” between “**mux**” and “**circuitry**”.
- (18) In claim 12, line 2; insert the word -- **circuitry**-- between “**mux**” and “**comprises**”.
- (19) In claim 19, line 7; insert -- **phase** -- between “**the**” and “**accumulator**”.
- (20) In claim 19, line 9; insert -- **as inputs** -- between “**multiplexer**” and “**to**”.

(21) In claim 19, line 13; insert -- **for FSK transmission**, -- between **"operation"** and **"is based"**.

(22) In claim 19, line 14; replace **"logic zero and the accumulated phase information and in the second mode of operation is based"** with -- **logic zero inputs and the accumulated phase information, and which, in the second mode of operation for PSK transmission, is based --**.

(23) In claim 21, line 3; delete -- **according** -- between **"agent"** and **"utilizing"**.

(24) In claim 21, line 3; insert -- **for frequency-shift keying (FSK) transmission using a logic 1 and logic 0 and an accumulated phase information** -- between **"rate"** and **";**".

(25) In claim 21, line 4; insert -- **second** -- between **"a"** and **"modulation"**.

(26) In claim 21, line 5; insert -- **using meaningful I and Q channel information and zero value phase information** -- between **"rate"** and **";**".

(27) In claim 21, line 12; insert -- **substantially** -- at the beginning of line, before **"transmitting"**.

Allowable Subject Matter

4. Claims 1-19 and 21 are allowed.
5. The following is an examiner's statement of reasons for allowance: The prior art of record Schwartz et al. (US Patent no. 5,945,885) fails to disclose, teach or suggest that the radio transmitting system supports a smooth switching between FSK frequency

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shift keying and PSK phase shift keying i.e. when the transmitter is communicating with a remote agent according to a first protocol utilizing a first modulation technique at a first data rate e.g. FSK modulation , if it determines that the remote agent is capable of communicating at a higher second data rate using a second modulation technique, the radio transmitter will go to the second data rate with second communication mode through a transition period in accordance with spectral mask requirements. Also the prior art of record fails to disclose, teach or suggest that the radio transmitter includes a Coordinate Rotation Digital Computer (CORDIC) block coupled to receive the accumulated phase value to receive the I and Q modulated data, and producing one of an FSK or a PSK modulated digital information signal, which, in the first mode of operation is based upon the logic one, the logic zero and the accumulated phase information and in the second mode of operation is based upon the accumulated phase information and upon the meaningful I and Q channel information..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is

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(571)270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off)8:00AM-5:00PMEST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./

Examiner, Art Unit 2611

April 24, 2008

/Shuwang Liu/

Supervisory Patent Examiner, Art Unit 2611